(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

531500

(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/036447 A1

(51) International Patent Classification[7]: G06F 17/00

(21) International Application Number:
PCT/KR2003/002135

(22) International Filing Date: 15 October 2003 (15.10.2003)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:
10-2002-0063153 16 October 2002 (16.10.2002) KR

(71) Applicants *(for all designated States except US)*: **ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE** [KR/KR]; Intellectual Property Department, 161 Gajeong-dong, Yuseong-gu, Daejeon-si 305-350 (KR). **INTER JUNGBO CO., LTD** [KR/KR]; 1 Fl., Jinyoung Bldg., 909-3, Daechi-dong, Gangnam-gu, Seoul 135-280 (KR). **INFORMATION AND COMMUNICATIONS UNIVERSITY EDUCATIONAL FOUNDATION** [KR/KR]; 10 Fl., Seoul Central Post Office Bldg., 21 Chungmuro 1-ga, Jung-gu, Seoul 100-709 (KR).

(72) Inventors; and

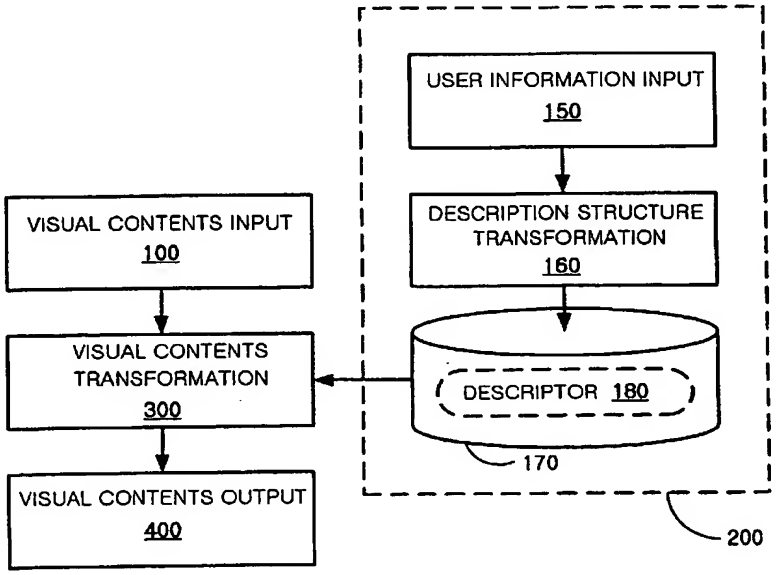
(75) Inventors/Applicants *(for US only)*: **HONG, Jin-Woo** [KR/KR]; 130-702 Hanbit Apt., Euen-dong, Yuseong-gu, Daejon-si 305-755 (KR). **YANG, Seung-Ji** [KR/KR]; 954-13, Haksung 1-dong, Wonju-si, Kangwon-do 220-963 (KR). **RO, Yong-Man** [KR/KR]; 816-1102, Saemirae 8 Apt., Nouen-dong, Yuseong-gu, Daejon-si 305-325 (KR). **NAM, Je-ho** [KR/KR]; 119-33 Yonhee1-dong, Seodaemun-gu, Seoul 157-909 (KR). **KIM, Jin-Woong** [KR/KR]; 305-1603 Expo Apt., Jeonmin-dong, Yusung-gu, Daejon-si 305-761 (KR). **KIM, Cheon-Seog** [KR/KR]; 6-803, Hatnim Apt., Dusan-dong, Seo-gu, Daejon-si 302-737 (KR).

(74) Agents: **KIM, Myung-Shin** et al.; Myung-Shin & Partners, International Patent & Trademark Office, 12 Fl., Jindo Bldg., 37 Dowha-dong, Mapo-gu, Seoul 121-040 (KR).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,

*[Continued on next page]*

(54) Title: METHOD AND SYSTEM FOR TRANSFORMING ADAPTIVELY VISUAL CONTENTS ACCORDING TO USER'S SYMPTOM CHARACTERISTICS OF LOW VISION IMPAIRMENT AND USER'S PRESENTATION PREFERENCES




(57) Abstract: Disclosed are a method and a system that could adaptively improve the visual quality of people with low-vision impairment, regardless of network and terminal. The low-vision impairment is described by a set of "symptoms" that is semantically defined. As the description tool of low vision impairments, it is flexible and reliable to use the proposed "symptoms" based descriptions rather than individually identified names of eye disease, because the user can describe his/her low-vision impairment by specifying associated symptoms based on his/her own experience. The inputted visual contents are adaptively transformed according to the low vision-impairment.

WO 2004/036447 A1

GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) **Designated States** *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**
— *with international search report*

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*